Exercício 4 de introdução à orientação a objetos – Lista 01

Andrew Gabriel Gomes – Programação I

4) Dado o código da classe abaixo:

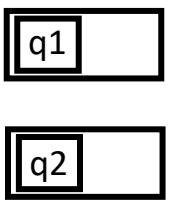
```
class Quadrado {
	int lado;
	int x;
	int y;

	 void imprime() {
		System.out.println("x = " + x);
		System.out.println("y = " + y);
	 }
}
```

Quadrado
Atributos: *Int lado;*   *Int x;*   *Int y;*
Métodos: *Void imprime();*

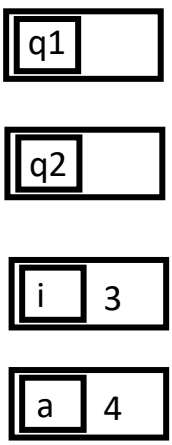
a) Informe o que o programa abaixo imprimirá na tela, mostrando a representação de memória que o programa terá ao final da execução da main.

```
class Main {
	public static void main(String[] args) {
	    1  Quadrado q1, q2;
	    2  int i = 3, a = 4;
	    3  q1 = new Quadrado();
	    4  q1.x = 8;
	    5  q1.y = 5;
	    6  q2 = q1;
	    7  a = i;
	    8  q1.lado = 10;
	    9  q2.x = 2;
	    10 q2.y = 3;
	    11 q2.imprime();
	    12 q1.imprime();
	}
}
```

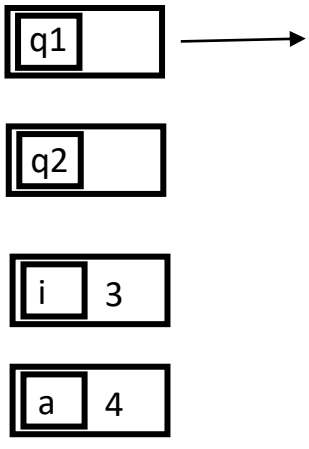
Linha 1:



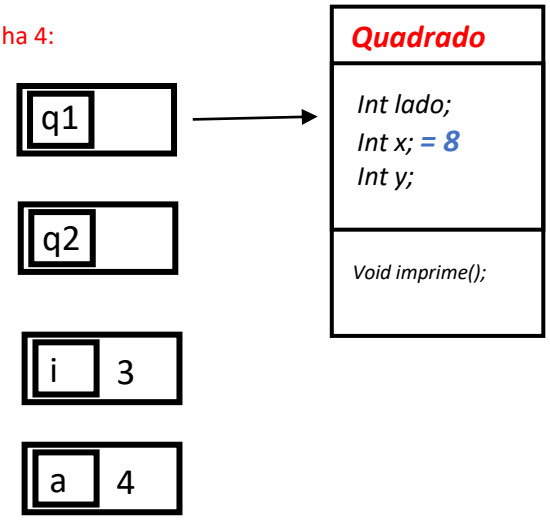
Linha 2:



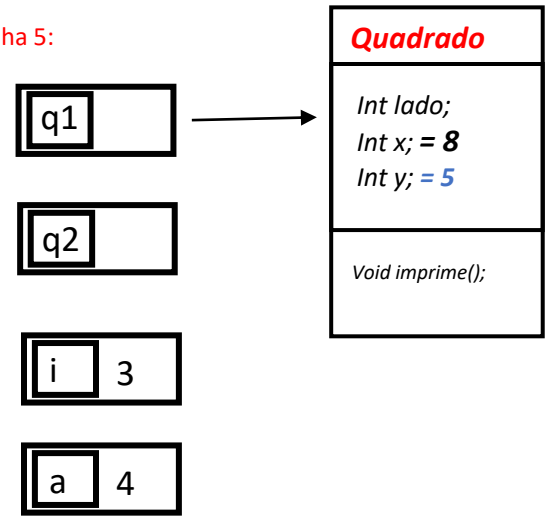
Linha 3:



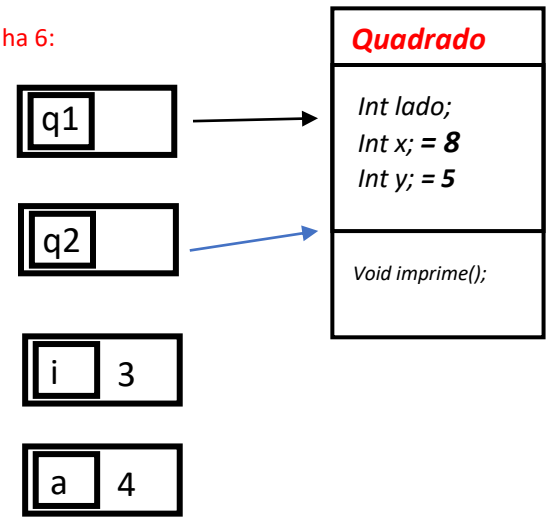
Linha 4:



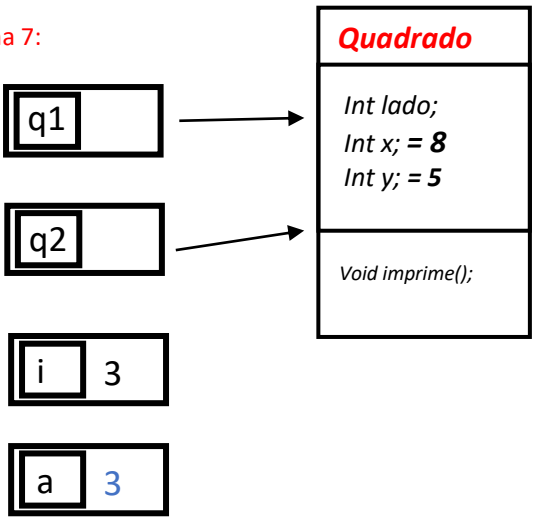
Linha 5:



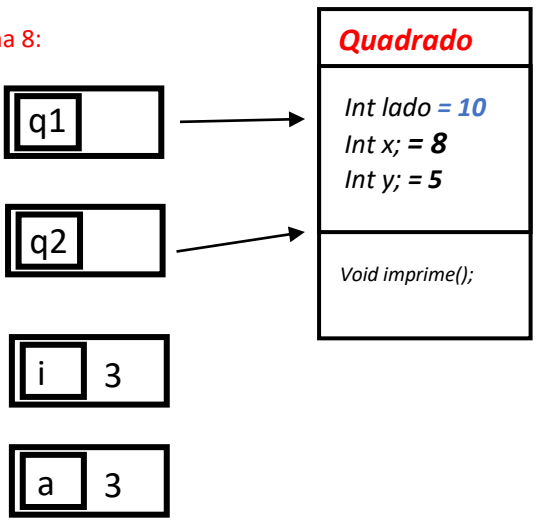
Linha 6:



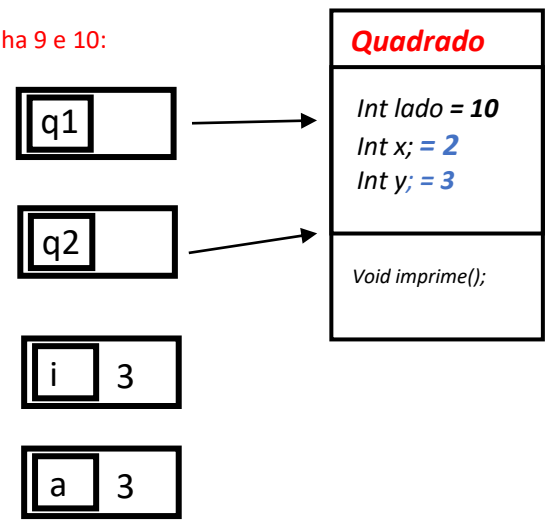
Linha 7:

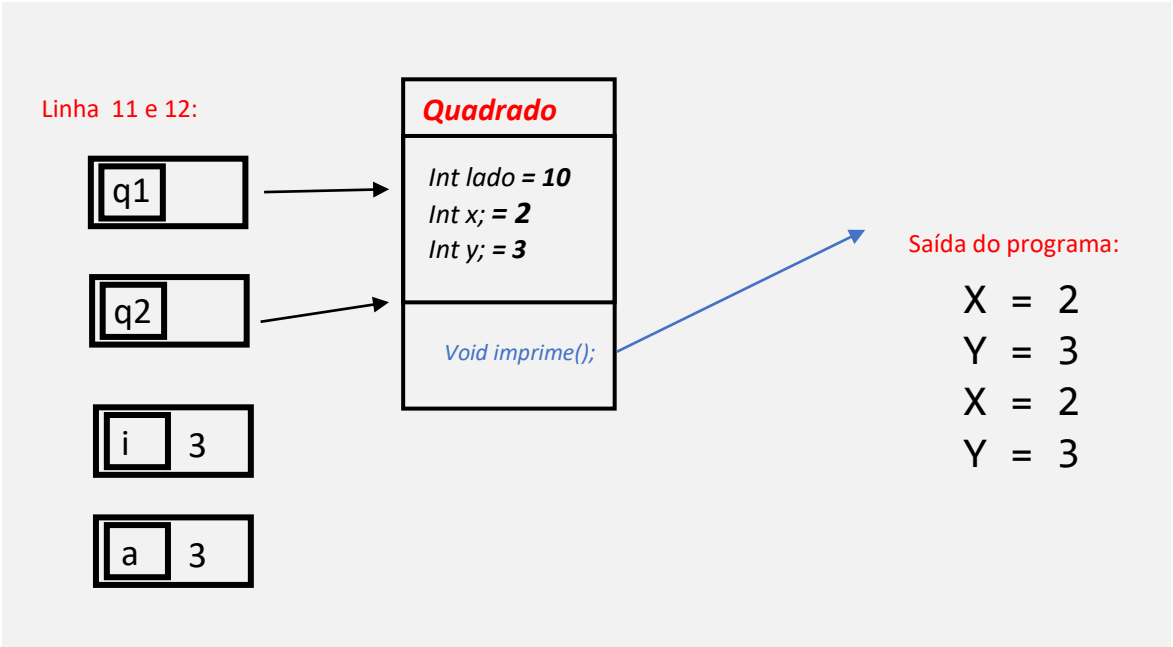


Linha 8:



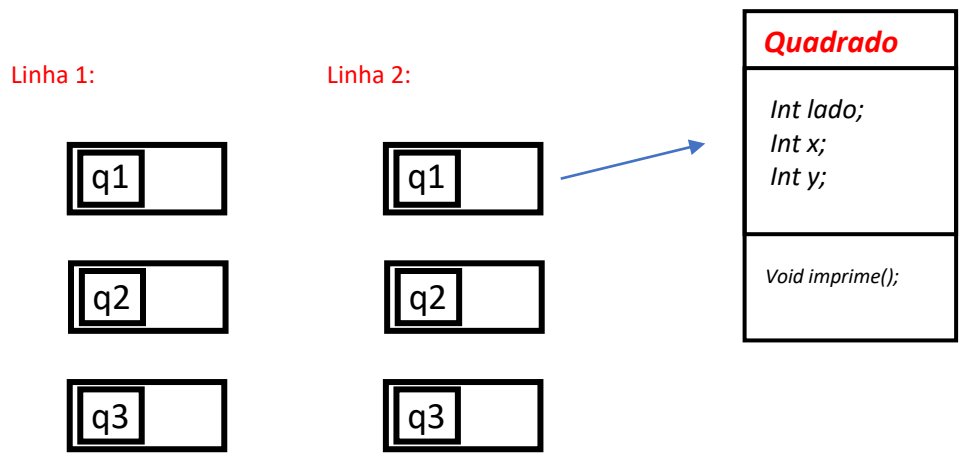
Linha 9 e 10:



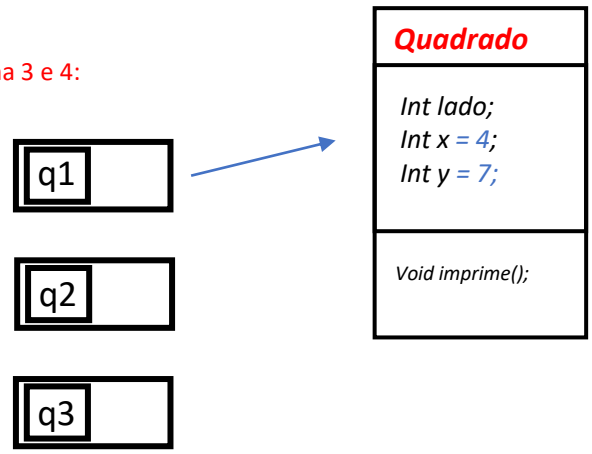


b) Informe o que o programa abaixo imprimirá na tela, mostrando a representação de memória que o programa terá ao final da execução da main.

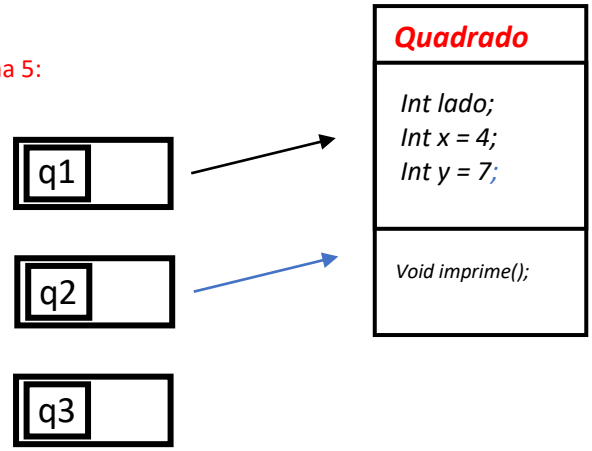
```
class Main {
      public static void main(String[] args) {
          1 Quadrado q1, q2, q3;
          2 q1 = new Quadrado();
          3 q1.x = 4;
          4 q1.y = 7;
          5 q2 = q1;
          6 q3 = q2;
          7 q1.imprime();
          8 q2.imprime();
          9 q1.lado = 10;
          10 q3.x = 2;
          11 q3.y = 3;
          12 q3.imprime();
      }
}
```



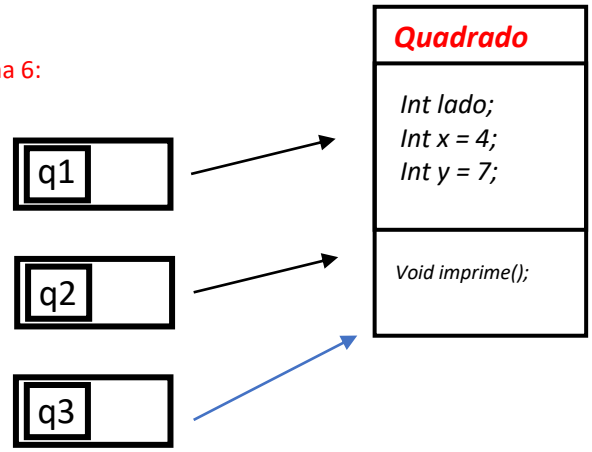
Linha 3 e 4:



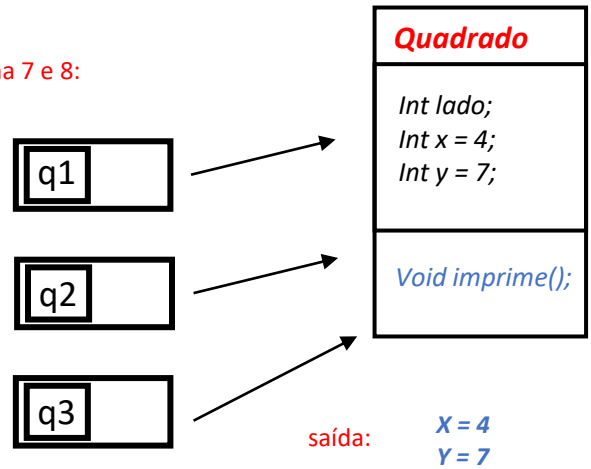
Linha 5:



Linha 6:



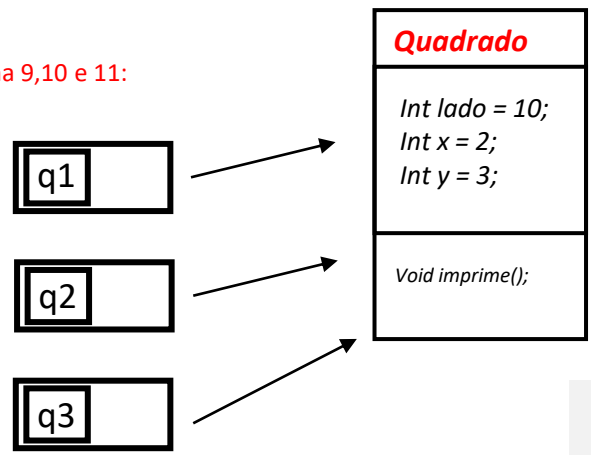
Linha 7 e 8:



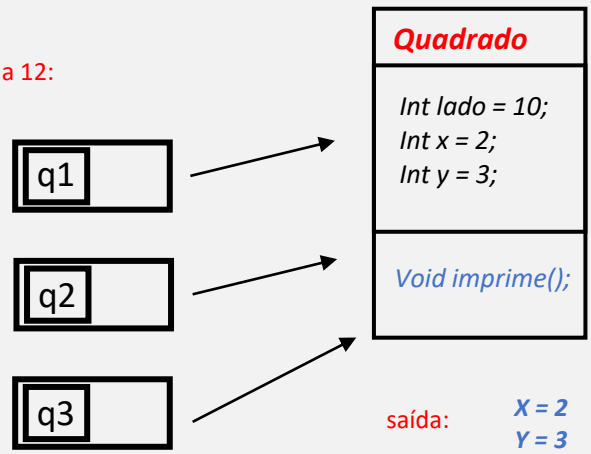
saída:

X = 4
Y = 7
X = 4
Y = 7

Linha 9,10 e 11:



Linha 12:



saída:

X = 2
Y = 3